FIBRE CHEMISTRY
Volume 39, Numbers 1-6, 2007
(A translation of *Khimicheskie Volokna*)

A
Aizenshtein, E. M. – 250, 355, 427
Aleksandrova, Yu. N. – 56, 332
Alekseeva, L. V. – 225
Anan'eva, T. A. – 131
Andreeva, E. V. – 322
Andrianova, G. P. – 56, 79
Artemenko, A. A. – 45
Askarov, M. A. – 49
Astashkina, O. V. – 144
Avagyan, A. A. – 268
B
Baeva, N. N. – 205
Baitimirov, D. R. – 76
Baranova, A. A. – 240
Barantsev, V. M. – 193, 344
Bazarov, Yu. M. – 7, 26
Belokurova, G. B. – 185
Belousov, A. S. – 197, 201 289, 475
Belov, A. A. – 263
Belova, E. N. – 263
Bereznenko, S. N. – 464
Bobylev, A. P. – 185
Bochkareva, E. V. – 221
Bodyalo, N. N. – 240
Bogoslovskiy, V.V. – 73
Bokova, E. S. – 56, 332
Borisov, V. A. – 279
Borisova, N. V. – 45
Buchukova, D. M. – 385
Budyka, A. K. – 450
Bulekova, A. A. – 178
Burinskii, S. V. – 103
C
Chalaya, N. E. – 218
Chapurina, M. A. – 180
Chernikov, A. N. – 279
Chernova, N.S. – 73
Chufarovskii, A. N. – 411
Chunaev, M. V. – 197, 201
D
Dedov, A. V. – 56, 332, 397, 454, 457
Demidov, A. V. – 83, 488, 492
Denisova, G. P. – 16, 379
Dmitriev, O. Yu. – 285
Dmitrieva, L. B. – 293
Dodonkin, Yu. V. – 210
Dolgalev, S. G. – 79
Druzhinina, T. V. – 173
Dubankova, N. P. – 213
Dzyubenko, L. S. – 372
E
Efimenkov, R. G. – 173
Ermakov, V. Yu. – 237
F
Fedorchenko, N. B. – 327
Feoktistova, T. A. – 245
Filatov, N. V. – 268
Filatov, V. N. – 263, 268
Fokina, N. A. – 464
Fomin, V. N. – 185, 272
G
Gal'braikh, L. S. – 180, 189, 322
Genis, A. V. – 1
Glazkovskii, Yu. V. – 424
Golikova, O. A. – 272
Golovanov, R. Yu. – 388
Golub, N. V. – 31
Gorbik, P. P. – 372
Gorchakova, V. M. – 185, 231, 272
Grachev, M. S. – 416
Grebennikov, S. F. – 411, 420
Gribanov, A. V. – 122
Gusakov, A. V. – 41, 336
I
Ivanov, A. P. – 351
Ivashchenko, N. S. – 304
Ivashkin, P. I. – 275
Izmailov, B. A. – 243
K
Kaputskii, F. N. – 31
Kardash, M. M. – 37, 327
Karelina, I. M. – 215
Karyakina, L. P. – 467
Kazakova, N. A. – 268
Keremetin, P. P. – 178
Kharchenko, I. M. – 173
Khokhlova, V. A. – 136
Kirokosyan, K. A. – 281
Kiselev, S. V. – 87
Kiya-Oglu, V. N. – 438
Kogan, A. G. – 240, 382, 461
Kolokolkina, N. V. – 180
Konev, A. S. – 76
Konev, S. F. – 76
Konovalova, L. Ya. – 205
Konovalova, M. V. – 318
Konstantinova, N. I. – 215
Konyukhova, S. V. – 237
Koroteeva, L. I. – 416, 480
Korovicheva S. Yu. – 136
Kosheleva, M. K. – 178
Kosterova, R. I. – 31
Koz'yakova, O. K. – 340, 424
Kozyrev, I. V. – 281
Kulagina, A. S. – 268
Kuramshin, A. R. – 210
Kurdenkova, A. V. – 221
Kuvaeva, E. P. – 372
Kuz'menko, T. V. – 300
Kuz'mina, I. V. – 263
Kuznetsov, A. A. – 407
Kuznetsov, A. Yu. – 131
Kuzyakova I. L. – 144
L
Larionov, O. S. – 193
Lebedeva, N. P. – 420
Levin, V. P. – 275
Lopakov, A. V. – 197, 201
Lopakov, Aleksandr V. – 289
Lopakov, Aleksei V. – 289
Lopatkina, M. V. – 247
Lysachenko, I. V. – 247
Lysenko, A. A. – 91, 93, 144
Lysenko, V. A. – 159
M
Makarov, A. G. – 83, 488, 492
Malyukova, E. B. – 185, 272
Mamagulashvili, V. G. – 450

Manyukov, E. A. – 205
Markvichev, N. S. – 263
Matveev, Yu. N. – 231
Matveev, P. V. – 245
Matveev, V. V. – 272
Medusheva, E. O. – 268
Medvedeva, N. G. – 144
Meglitskii, V. A. – 340
Merkulov, A. A. – 215
Mizerovskii, L. N. – 7, 26
Mordovina, Yu. V. – 197, 201
Murashova, V. E. – 234
N
Naumov, D. A. – 178
Nazarov, V. G. – 56, 332
Negodyaeva, G. S. – 205
Nikiforova, O. V. – 327
Novikov, A. V. – 344
Novoselov, N. P. – 153
O
Ogorodnikov, B. I. – 450
Oleneva, O. S. – 300
P
Pachina, O. V. – 16
Papenkova, K. E. – 304
Pavlov, A. V. – 37, 327
Pavlov, M. G. – 7
Pavlov, N. N. – 64, 193
Pavlova, V. V. – 213
Perepelkin, K. E. – 41, 163 308, 336, 363, 420
Petrenko, V. E. – 153
Petrova, T. V. – 438
Pilyushina, I. V. – 227
Platonov, A. V. – 56, 332
Platova, T. E. – 213
Polikarpov, V. V. – 185
Polyakov, A. E. – 245
Polyakov, K. A. – 245
Polyakova, T. I. – 285
Pozdeeva, M. G. – 379
Prorokov, V. N. – 20, 445
Prorokova, N. P. – 20, 445
Prosvirnitsyn, A. V. – 87
Prusov, A. N. – 12
Prusova, S. M. – 12
Puzikova, N. P. – 234
R
Rabaeva, Yu. M. – 318
Rafikov, A. S. – 49
Rakhimov, F. Kh. – 49
Ramazaeva, L. F. – 16, 379
Razboeva, V. N. – 1
Redina, L. V. – 180
Rezanova, N. M. – 372
Rodionov, V. A. – 210, 243
Roshchina, O. A. – 340, 424
Rumyantsev, Yu. D. – 247
Rykunov, V. A. – 450
Ryl'tsev, V. V. – 268
S
Sadova, S. F. – 205
Safonov, V. V. – 218
Samsonova, T. I. – 340, 424
Sap'yanenko, A. A. – 372
Sashina, E. S. – 153
Savchenko, I. A. – 464
Sazanov, Yu. N. – 122
Sazhin, B. S. – 197, 201, 289, 293, 475
Sazhina, M. B. – 197, 201, 293
Sedelkin, V. M. – 16, 379
Sergeenkov, A. P. – 237, 414
Serkov, A. T. – 60
Shablygin, M. M. – 351
Shcherbakov, V. P. – 227, 285
Shepelev, A. D. – 450
Shilov, A. V. – 245
Shkabara, A. I. – 37, 327
Shustov, Yu. S. – 221
Silant'eva, V. G. – 7
Sizyakin, A. V. – 66
Skobova, N. V. – 461
Sladkov, O. M. – 45
Sletkina, L. S. – 189
Slutsker, G. Ya. – 87
Sokolovskaya, T. S. – 400
Stalevich, A. M. – 83, 87, 488, 492
Stefanskaya, I. V. – 385
Surkova, A. N. – 16, 379
Sverdlova, N. I. – 144
T
Tarakanov, B. M. – 385
Tarasenko, A. A. – 159
Tarasov, V. N. – 66
Tikhonov, I. V. – 261
Tovmash, A. V. – 450
Trofimenko, M. N. – 243
Tsebrenko, M. V. – 372
Tsyganov, I. B. – 227, 285
U
Usov, V. V. – 1
V
Vasil'ev, A. F. – 351
Vasil'ev, M. P. – 114
Vavilova, S. Yu. – 20, 445
Vedeneeva, I. V. – 189
Venediktova, A. G. – 344
Voloshchik, T. E. – 234
Voronina, E. N. – 480
Voronova, M. I. – 388
Y
Yas'ko, M. E. – 327
Yudanova, T. N. – 322
Yurkshtovich, N. K. – 31
Yurkshtovich, T. L. – 31
Z
Zaborsky, M. – 153
Zaitsev, A. A. – 215
Zakharov, A. A. – 388, 414
Zakharova, I. M. – 443
Zamostotskii, E. G. – 382, 461
Zavadskii, A. E. – 392, 443, 483
Zhmakin, L. I. – 281
Zhukovskii, V. A. – 136, 411
Zhuravlev, D. V. – 332
Zinov'ev, A. P. – 144
Zubkova, N. S. – 215

FIBRE CHEMISTRY
Volume 39, Numbers 1-6, 2007
(A translation of *Khimicheskie Volokna*)

Volume 39, Number 1, January-February, 2007

STATUS OF PRODUCTION AND USE OF POLYPROPYLENE SPUNBOND IN RUSSIA AND ABROAD – A. V. Genis, V. V. Usov, and V. N. Razboeva 1 3

CHEMISTRY AND TECHNOLOGY OF CHEMICAL FIBRES
Liquid-Phase Hydrolytic Polymerization of Caprolactam at 483 K – Yu. M. Bazarov, M. G. Pavlov, V. G. Silant'eva, and L. N. Mizerovskii 7 8
Viscosity Properties of Aqueous Solutions of Carboxymethylcellulose and Hydroxyethylcellulose Blends – A. N. Prusov and S. M. Prusova 12 11
Rheological Properties of Spinning Solutions for Cellulose Acetate Ultrafiltration Membranes – V. M. Sedelkin, G. P. Denisova, A. N. Surkova, L. F. Ramazaeva, and O. V. Pachina 16 15
Effect of Ammonium Salts on Poly(Ethylene Terephthalate) Materials – N. P. Prorokova, S. Yu. Vavilova, and V. N. Prorokov 20 17
Hydrolytic Polymerization of Caprolactam Accompanied by Crystallization of the Polymer – Yu. M. Bazarov and L. N. Mizerovskii 26 22

MATERIALS SCIENCE
Esterification of Viscose Fibres with Orthophosphoric Acid and Study of Their Physicochemical and Mechanical Properties – N. K. Yurkshtovich, T. L. Yurkshtovich, F. N. Kaputskii, N. V. Golub, and R. I. Kosterova 31 26
Production of Polikon Sheet Chemisorption Fibre Filters – M. M. Kardash, A. V. Pavlov, and A. I. Shkabara 37 30
Polyester Filter Fabrics and Their Properties – A. V. Gusakov and K. E. Perepelkin 41 33
Developing an Electric Heater Design Based on Carbon Fibres – N. V. Borisova, O. M. Sladkov, and A. A. Artemenko 45 36
Composite Sorption Filter Bags with Fibre and Disperse Fillers – F. Kh. Rakhimov, A. S. Rafikov, and M. A. Askarov 49 39
Sorption Characteristics of Needle-Punch and Modified Materials – A. V. Dedov 52 41
Mechanical Characteristics of Nap-Raised Nonwoven Materials – A. V. Dedov, Yu. N. Aleksandrova, A. V. Platonov, E. S. Bokova, V. G. Nazarov, and G. P. Andrianova 56 43

PHYSICAL CHEMISTRY OF FIBRE-FORMING POLYMERS
Ir Spectroscopic Identification of Chemical Bonds in Macromolecules of Polyacrylonitrile and Carbon Fibres – A. T. Serkov 60 46
Correlation of the Size and Structure of Nanoparticles of Metal Salts that Modify the Properties of Synthetic Fibres – N. N. Pavlov 64 48

MACHINES AND EQUIPMENT
Developments and Technical Potentials of New Types of Synchronous Electric Motors for the Takeup-Winding Units of Spinning Machines – V. N. Tarasov and A. V. Sizyakin 66 50

METHODS OF INVESTIGATION
Potentiometric Determination of the Content of Water-Soluble Organic Amides – V.V. Bogoslovskiy and N.S. Chernova 73 55
Method of Measuring the Modulus of Elasticity of Carbon Tow – S. F. Konev, A. S. Konev, and D. R. Baitimirov 76 57
Methods of Controlling Curing Kinetics in Polymer Coatings – G. P. Andrianova, and S. G. Dolgalev 79 59
Systems Analysis of the Viscoelasticity of Polyester Fibres – A. V. Demidov, A. G. Makarov, and A. M. Stalevich 83 62
Creep and Recovery of Polypropylene Nonwoven Material – S. V. Kiselev, A. V. Prosvirnitsyn, G. Ya. Slutsker, and A. M. Stalevich 87 65

Volume 39, Number 2, March-April, 2007

ON THE 110th BIRTHDAY OF A. I. MEOS
A Life Dedicated to Science – V. E. Romanov and A. A. Lysenko 91 3
Prospects for Development of Research and Production of Carbon Fibre Sorbents – A. A. Lysenko 93 4
Basic Trends in Practical Use of Ion- and Electron-Exchange Fibres and Materials Made from Them – S. V. Burinskii 103 11
Basic Scientific and Practical Results and Prospects for Development of Collagen-Based Biomaterials – M. P. Vasil'ev 114 20
Thermostable Fibres and the Carbon-Fibre-Reinforced Plastics Made from Them – A. V. Gribanov and Yu. N. Sazanov 122 26
Structure and Properties of Orption-Active Nanocomposites from Ultrahigh-Molecular-Weight Polyethylene – T. A. Anan'eva and A. Yu. Kuznetsov 131 33
Surgical Suture Materials with Antimicrobial Properties – V. A. Zhukovskii, V. A. Khokhlova, and S. Yu. Korovicheva 136 37
Metal-Containing Chemical Fibres and Their Use in Biotechnology – A. A. Lysenko, O. V. Astashkina, N. I. Sverdlova, A. P. Zinov'ev, N. G. Medvedeva, and I. L. Kuzyakova 144 44
Study of Dissolution of Cellulose in Ionic Liquids by Computer Modeling – N. P. Novoselov, E. S. Sashina, V. E. Petrenko, and M. Zaborsky 153 51
Porous Carbon-Carbon Composites for Fuel Cells – A. A. Tarasenko, A. A. Lysenko, and V. A. Lysenko 159 55
Lyocell Fibres Based on Direct Dissolution of Cellulose in N-Methylmorpholine N-Oxide: Development and Prospects – K. E. Perepelkin 163 58

Volume 39, Number 3, May - June, 2007

TEXTILE — 2006. Articles from the Proceedings of the All-Russian Scientific and Technical Conference "Current Technologies and Equipment in the Textile Industry" (Moscow State Textile University, November, 2006)
Thermal Transformations of Polyvinyl Alcohol and Hydrated Cellulose Fibres in the Presence of Phosphates of Nitrogen-Containing Organic Compounds – T. V. Druzhinina, R. G. Efimenkov, and I. M. Kharchenko 173 3
Investigation and Calculation of Diffusion Processes in Thin Fibre Materials and Fibre-Forming Polymers – M. K. Kosheleva, A. A. Bulekova, P. P. Kerametin, and D. A. Naumov 178 7

Surface Energy of Polyester and Viscose Fibres Modified with Polyfluoroalkyl Acrylates – M. A. Chapurina, L. S. Gal'braikh, L. V. Redina, and N. V. Kolokolkina 180 9
Manufacture of Polymer Composite Materials Using Copolymeric Latexes of Different Nature – G. B. Belokurova, E. B. Malyukova, A. P. Bobylev, V. N. Fomin, V. M. Gorchakova, and V. V. Polikarpov 185 12
Modification of Viscose Fibres with Polyfluoralkyl Acrylate Latexes with a Different Surfactant Content – I. V. Vedeneeva, L. S. Sletkina, and L. S. Gal'braikh 189 15
Prospects for Modification of Para-Aramid Fibres with Metal Complex Salts in Conditions of Microwave Exposure – V. M. Barantsev, O. S. Larionov, and N. N. Pavlov 193 18
Classification of Fibre-Forming Polymers as Objects of Drying – B. S. Sazhin, M. B. Sazhina, A. S. Belousov, M. V. Chunaev, Yu. V. Mordovina, and A. V. Lopakov 197 21
Comprehensive Analysis of Disperse Fibre-Forming Polymers as Objects of Drying in a Suspended Bed – B. S. Sazhin, M. B. Sazhina, A. S. Belousov, M. V. Chunaev, Yu. V. Morodovina, and A. V. Lopakov 201 24
Sorption and Densitometric Properties of Meta/Para-Aramid Fibres – N. N. Baeva, E. A. Manyukov, S. F. Sadova, L. Ya. Konovalova, and G. S. Negodyaeva 205 26
Developing Technology for Production of Combined Fibres for Protective Articles – A. R. Kuramshin, V. A. Rodionov, and Yu. V. Dodonkin 210 30
Change in the Properties of Polycaproamide Fibres in Treatment with Metal Complex Salts – N. P. Dubankova, V. V. Pavlova, and T. E. Platova 213 33
Toxicity of Combustion Products and Smoking of Decorative-Finishing Fabrics – N. S. Zubkova, I. M. Karelina, A. A. Zaitsev, A. A. Merkulov, and N. I. Konstantinova 215 34
Dyeing of Polyamide—Wool Fibre Blend with Acid Dyes Using α-Cyclodextrin – N. E. Chalaya and V. V. Safonov 218 37
Prediction of the Air Permeability of Fabrics for Institutional Use After Exposure to Light and Weather – Yu. S. Shustov, A. V. Kurdenkova, and E. V. Bochkareva 221 39
Theoretical Aspects of Predicting the Electrostatic Properties of Textile Materials – L. V. Alekseeva 225 42
Ballooning in Spinning Textile-Metal Fibre – V. P. Shcherbakov, I. B. Tsyganov, and I. V. Pilyushina 227 43
Nonwoven Textiles for Treatment of Wastewaters to Remove Petroleum Products – Yu. N. Matveev and V. M. Gorchakova 231 46
Study of the Flame Resistance of Needle-Punch Heat-Insulating Material – V. E. Murashova, T. E. Voloshchik, and N. P. Puzikova 234 48
Pressure Loss and Regenerability of Nonwoven Bag Filter Materials for Cleaning Air – V. Yu. Ermakov, A. P. Sergeenkov, and S. V. Konyukhova 237 50
Combined Sewing Thread of New Structure – N. N. Bodyalo, A. A. Baranova, and A. G. Kogan 240 52
Effect of Impregnation on the Properties of Cord-Braid Articles – M. N. Trofimenko, V. A. Rodionov, and B. A. Izmailov 243 54
Automatic Control System for Spinning and Winding of Synthetic Fibres – A. V. Shilov, P. V. Matveev, T. A. Feoktistova, K. A. Polyakov, and A. E. Polyakov 245 56

System for Automatic Control of the Temperature Conditions in Texturing of Synthetic Fibres – M. V. Lopatkina, Yu. D. Rumyantsev, and I. V. Lysachenko 247 58

THE MARKET FOR SYNTHETIC FIBRES AND YARNS, POLYMERS, AND INITIAL RAW MATERIAL IN THE SECOND HALF OF 2006 – E. M. Aizenshtein 250 60

TO OUR READERS – I. V. Tikhonov 261 72

Volume 39, Number 4, July-August, 2007

TEXTIL' — 2006. Articles based on the Proceedings of the All-Russian Scientific and Technical Conference "Modern Technologies and Equipment in theTextile Industry" (Moscow State Textile University, November, 2006)

Development of Cellulose Textile Materials Containing Chitosan and Crab Hepatopancreas Proteolytic Complex and Study of Their Properties – A. A. Belov, E. N. Belova, I. V. Kuz'mina, V. N. Filatov, and N. S. Markvichev 263 3

New Medical Materials with an Integral Lasting Effect based on Fibre-Forming Polymers – E. O. Medusheva, V. N. Filatov, V. V. Ryl'tsev, N. A. Kazakova, N. V. Filatov, A. S. Kulagina, and A. A. Avagyan 268 7

Fabrication of Sorption-Active Nonwoven Materials – O. A. Golikova, E. B. Malyukova, V. N. Fomin, V. M. Gorchakova, and V. V. Matveev 272 10

Young's Modulus of Highly Oriented Polypropylene Films – V. P. Levin and P. I. Ivashkin 275 12

Prediction of the Breaking Load of Viscose Yarn with Adhesive Bonding of Fibres – V. A. Borisov and A. N. Chernikov 279 15

Experimental Study of the Thermophysical Properties of Carbon Fibres – L. I. Zhmakin, I. V. Kozyrev, and K. A. Kirokosyan 281 16

Theoretical Principles of Experimental Determination of Fibre Flexural Rigidity – V. P. Shcherbakov, I. B. Tsyganov, O. Yu. Dmitriev, and T. I. Polyakova 285 19

Processing Fibre-Forming Polymers in Helical Flow – A. S. Belousov, B. S. Sazhin, Aleksei V. Lopakov, and Aleksandr V. Lopakov 289 21

Evaluation of the Adhesive-Self-Adhesive Properties of Disperse Fibre-Forming Polymers – B. S. Sazhin, L. B. Dmitrieva, and M. B. Sazhina 293 24

Method of Assessing the Fit of Market Segments – O. S. Oleneva and T. V. Kuz'menko 300 29

Determination of Factors of the Competitive Position of a Company Manufacturing Chemical Fibres – N. S. Ivashchenko and K. E. Papenkova 304 31

CHEMISTRY AND TECHNOLOGY OF CHEMICAL FIBRES

Physicochemical Principles of Spinning of Natural Fibroin Fibres and Ways of Utilizing Them in Developing Chemical Fibre Technology. Part 1. Principles of Formation of Fibres and Fibre Materials in Nature. Spinning of Natural Fibroin Fibres – K. E. Perepelkin 308 34

Surface Modification and Dyeing of Polyester Fibres Using Magnetically Activated Aqueous Solutions – M. V. Konovalova and Yu. M. Rabaeva 318 41
Study of the Possibility of Obtaining Viscose Fibre with Biologically Active Properties by a Continuous Method – T. N. Yudanova, E. V. Andreeva, and L. S. Gal'braikh 322 44

MATERIALS SCIENCE
Sorption of Synthetic Surfactants by "Policon" Materials – M. M. Kardash, N. B. Fedorchenko, A. V. Pavlov, A. I. Shkabara, M. E. Yas'ko, and O. V. Nikiforova 327 48
Filtering Properties of Nap-Raised Nonwoven Materials – V. G. Nazaraov, A. V. Platonov, Yu. N. Aleksandrova, A. V. Dedov, Zhuravlev, and E. S. Bokova 332 51
New Types and Properties of Dryer-Conveyor Canvas for Production of Cardboard – A. V. Gusakov and K. E. Perepelkin 336 54

METHODS OF INVESTIGATION
On Elaboration of the Intergovernmental Standard "Chemical Fibres. Methods of Determination of the Mass Fraction of Oiling Agent" Possible Replacement of Carbon Tetrachloride with Other Solvents in Determination of the Oiling Agent Content in Chemical Fibres – T. I. Samsonova, O. A. Roshchina, V. A. Meglitskii, and O. K. Koz'yakova 340 58
Determination of the Composition of Condensate after Physicochemical Treatment in Production of Capron Fibre – A. G. Venediktova, A. V. Novikov, and V. M. Barantsev 344 61
Uncertainty in Assessing the Quality of the Results of Measurements – A. F. Vasil'ev, M. M. Shablygin, and A. P. Ivanov 351 66

Volume 39, Number 5, September-October, 2007

World Production and Consumption of Polyester Fibres and Yarn. Status and Prospects for the Russian Market – E. M. Aizenshtein 355 3

CHEMISTRY AND TECHNOLOGY OF CHEMICAL FIBRES
Physicochemical Principles of Spinning of Natural Fibroin Fibres and Ways of Using Them in Chemical Fibre Technology. Part 2. Structure and Properties of Natural Fibroin Fibres. Use of Principles of Biomimetics in Developing Chemical Fibre Technologies – K. E. Perepelkin. 363 9
Production of Polypropylene Microfibres Containing a Filler in the Nanostate – M. V. Tsebrenko, N. M. Rezanova, E. P. Kuvaeva, A. A. Sap'yanenko, L. S. Dzyubenko, and P. P. Gorbik 372 16
Ultrafiltration Membranes Made of Secondary Cellulose Acetate Modified with Active Carbon – V. M. Sedelkin, G. P. Denisova, L. F. Ramazaeva, M. G. Pozdeeva, and A. N. Surkova 379 21
The Manufacturing Process for Production of Combined Conducting Fibres – E. G. Zamostotskii and A. G. Kogan 382 24

MATERIALS SCIENCE
Effect of the Composition of the Binder on the Mechanical Indexes of Microplastics Made from Lavsan Fibre – B. M. Tarakanov, D. M. Buchukova, and I. V. Stefanskaya. 385 26

Sorption of Toluene from Aqueous Solutions with Polyethylene and Cellulose Powders and Composite Materials Made from Them – M. I. Voronova, R. Yu. Golovanov, and A. G. Zakharov. ... 388 28
Effect of the Structure of Textile Materials on Modification of Cotton Fibres in Treatment with Sodium Hydroxide Solutions – A. E. Zavadskii ... 392 31
Needle-Punch Materials with High Compressive Strength – A. V. Dedov ... 397 34
Effect of the Fluffiness of Nonwoven Materials on the Surface Heat-Transfer Coefficient in Natural Convection – T. S. Sokolovskaya ... 400 37
Use of Statistical Testing Simulation in Studying the Effect of the Scale Factor on the Strength Characteristics of Textile Fibres – A. A. Kuznetsov. ... 407 41
Sorption of Moisture by Resorbable Surgical Sutures in a Wide Temperature Range – S. F. Grebennikov, V. A. Zhukovskii, and A. N. Chufarovskii ... 411 44
Features of Measurement of the Strength Properties of Sewing Thread in Designing Lap-Sewn Fabrics – A. P. Sergeenkov and A. A. Zakharov ... 414 46
Effect of the Drafting Force on the Strength of the Bottom of the Spinneret – M. S. Grachev and L. I. Koroteeva ... 416 47
Sorption of Water Vapors by High-Strength Para-Aramid Fibres – K. E. Perepelkin, S. F. Grebennikov, and N. P. Lebedeva ... 420 50

RESEARCH METHODS
Comparative Analysis of Methods of Determining the Oiling Agent Content in Chemical Fibres – T. I. Samsonova, O. A. Roshchina, O. K. Koz'yakova, and Yu. V. Glazkovskii ... 424 53

Volume 39, Number 6, November-December, 2007

CHEMICAL FIBRES IN 2006 IN THE WORLD AND IN RUSSIA – E. M. Aizenshtein ... 427 3

CHEMISTRY AND TECHNOLOGY OF CHEMICAL FIBRES
Modeling of Jet Flow of Poly-(p-Phenylene Terephthalamide) Solution – T. V. Petrova and V. N. Kiya-Oglu ... 438 12
Structural Changes in Polycaproamide During Thermal Drawing of Industrial Fibres – I. M. Zakharova and A. E. Zavadskii ... 443 15
Effect of Quaternary Ammonium Compound Preparations on Poly(Ethylene Terephthalate) Fibre – N. P. Prorokova, S. Yu. Vavilova, and V. N. Prorokov ... 445 17

MATERIALS SCIENCE
Adsorption of Hydrogen and Methane by Carbon Foam Based on Carbonized Polyamide Fibres – A. V. Tovmash, A. K. Budyka, V. G. Mamagulashvili, V. A. Rykunov, A. D. Shepelev, and B. I. Ogorodnikov ... 450 21
Estimation of the Air Permeability of Needlepunch Materials – A. V. Dedov ... 454 23
Modeling of the Air Filtration Rate in Needlepunch Materials – A. V. Dedov ... 457 26
A Comprehensive Analysis of the Properties of Combined Conducting Thread – N. V. Skobova, E. G. Zamostotskii, and A. G. Kogan ... 461 29
Design of Special-Purpose Corsetry Elements Using Nonwovens – I. A. Savchenko, S. N. Bereznenko, and N. A. Fokina ... 464 31

MACHINES AND EQUIPMENT

Method of Optimizing Use of New Technology in Spinning – L. P. Karyakina **467** **33**

Characteristics of Flow Structures in Units for Processing Fibre-Forming Polymers in Active Hydrodynamic Regimes – A. S. Belousov and B. S. Sazhin **475** **40**

Features of Formation of Cylindrical Packs of Mineral Fibres – L. I. Koroteeva and E. N. Voronina **480** **44**

RESEARCH METHODS

The X-Ray Diffraction Method of Determining the Polymorphous Composition of Cellulose for Textured Materials – A. E. Zavadskii **483** **46**

Version of Mathematical Modeling of Deformation Processes in Synthetic Fibres – A. V. Demidov, A. G. Makarov, and A. M. Stalevich **488** **49**

Study of the Elastic, Viscoelastic, and Plastic Characteristics of Chemical Fibres – A. V. Demidov, A. G. Makarov, and A. M. Stalevich **492** **52**

INDEX

Author Index, Volume 39, Number 1-6, 2007 ..... **497**

Tables of Contents, Volume 39, Number 1-6, 2007 ..... **501**